

CLAIMS

1. A structure having a plurality of mesopores, comprising:

5 a dendritic framework having mesopores passing through the framework in the direction intersecting the longitudinal direction of the framework.

2. The structure according to claim 1, wherein the mesopores are perpendicular to the longitudinal direction of the framework.

10 3. The structure according to claim 1, wherein the dendritic framework forms macropores by mutual linking of branched portions of the framework, or macropore-sized voids are formed between the frameworks adjacent to one another.

15 4. The structure according to claim 1, wherein the mesopores are hexagonally symmetrically arranged.

5. The structure according to claim 1, wherein the mesopores have a pore size distribution in which 80% or more of the mesopores fall within a range 20 having a width of 10 nm and a maximal value.

6. The structure according to claim 1, wherein a biological material is supported in the mesopores.

25 7. A porous material formed a plurality of particles, comprising the particle comprised of the structure according to claim 1.

8. A sensor for detecting a specimen, which sensor is comprised of the porous material according

to claim 7 and an electrode, and detects an electric output signal based on a reaction between the specimen and a biological material supported in the mesopores.

5 9. A method for detecting a specimen, comprising the steps of:

preparing a sensor in which a biological material is supported in the mesopores of the structure according to claim 1;

10 applying a fluid that contains a specimen to the sensor; and

detecting an output signal based on a reaction between the biological material and the specimen.

10. An enzyme electrode comprising a porous material which supports the enzyme and an electron transfer substance for transferring to the electrode an electron transferred from the enzyme,

wherein the electron transfer substance is immobilized on the porous material.